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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,873	04/15/2004	Shannon V. Davidson	064747.1016	7114
45507	7590	12/04/2007	EXAMINER	
BAKER BOTTS LLP 2001 ROSS AVENUE 6TH FLOOR DALLAS, TX 75201-2980			CHEN, YI	
		ART UNIT	PAPER NUMBER	
		4152		
			NOTIFICATION DATE	DELIVERY MODE
			12/04/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail3@bakerbotts.com  
PTOmail4@bakerbotts.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/824,873	DAVIDSON, SHANNON V.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Yi Chen	4152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 April 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 April 2004 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>See Continuation Sheet</u> .	6) <input type="checkbox"/> Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9/14/2007, 5/18/2007, 3/26/2007, 3/2/2007, 12/29/2006, 11/13/2006, 10/13/2006, 6/14/2006, 5/8/2006, 3/8/2006, 10/10/2005, 8/15/2005, 8/1/2005, 4/15/2004.

## **DETAILED ACTION**

1. Claims 1-21 are pending in this application.

### ***Information Disclosure Statement***

2. The information disclosure statement, which filed on 14 September 2007, does not include Form PTO-1449 as indicated in the letter.

### ***Claim Rejections - 35 USC § 102***

3. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-4, 7-11, 14-18, and 21, are rejected under 35 U.S.C. 102(b) as being anticipated by Haynes et al., ("A visualization tool for analyzing cluster performance data", Proceedings of 2001 IEEE International Conference on Cluster Computing, 2001), hereinafter Haynes.**

5. Regarding claim 1, Haynes discloses a method for providing a graphical user interface in a High Performance Computing (HPC) environment, (section 1, line 15-18, figure 1 and figure 2), comprises, collecting information on a plurality of HPC nodes, (section 4, line 18 - 36, figure 2), each node comprising an integrated fabric, (section 3,

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line 9-15), generates a plurality of graphical elements based, at least in part, on the collected information, and presenting at least a portion of the graphical elements to a user, (figure 2).

6. Regarding claim 8, Haynes discloses a Graphical User Interface in a High Performance Computing (HPC) environment, (section 1, line 15-18, figure 1 and figure 2), operable to, collecting information on a plurality of HPC nodes, (section 4, line 18 - 36, figure 2), each node comprising an integrated fabric, (section 3, line 9-15), generates a plurality of graphical elements based, at least in part, on the collected information, and presenting at least a portion of the graphical elements to a user, (figure 2).

7. Regarding claim 15, Haynes discloses a system for providing a graphical user interface in a High Performance Computing (HPC) environment, (section 1, line 15-18, figure 1 and figure 2), comprises, a plurality of HPC node, each node comprising an integrated fabric; (figure 2, section 3, line 9-15), and a client operable to, (The GUI allows dynamic specification of the model, parameter, and job files, section 5, line 36-41), collecting information on a plurality of HPC nodes, generate a plurality of graphical elements based, at least in part, on the collected information; and present at least a portion of the graphical elements to a user. (section 4, line 18 - 36, figure 2)

8. Regarding claims 2, 9, and 16, Haynes discloses the collected information comprising physical data on each HPC node. (figure 2, section 3, line 44-65)

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9. Regarding claims 3, 10, and 17, Haynes discloses the physical data comprising one or more of the following: processor utilization; memory utilization; physical location; IP address; and bandwidth. (figure 2, section 3, line 44-65)

10. Regarding claims 4, 11, and 18, Haynes discloses one of the graphical elements comprising a view of a topology of the plurality of HPC nodes, (figure 2), the topology enabled by the integrated fabric of each node. (figure 2, section 3, line 9-15)

11. Regarding claims 7, 14, and 21, Haynes discloses receiving a notification of a failure of one of the plurality of HPC nodes; (section 6, line 32-48), and updating the view of the topology based on the notification. (section 5, line 88-97)

***Claim Rejections - 35 USC § 103***

**12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**13. Claims 5-6, 12-13, and 19-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Haynes as applied to claims 1-4, 8-11, and 15-18, above in view of Neiman et al. (US 2003/0154112 A1), thereafter Neiman.**

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14. Regarding Claim 5, 12, and 19, Haynes discloses receiving a job submission from the user, (user jobs, section 4, line 29; the GUI allows dynamic specification of the model, parameter, and job file, section 5, line 37-41). Haynes also discloses that updating the view of the topology based on the dynamic allocation of the second subset. (section 5, line 88-97)

Haynes doesn't explicitly disclose communicating the job submission comprising at least one parameter; communicating the job submission to a job scheduler for dynamic allocation of a second subset of the plurality of HPC nodes;

Neiman discloses communicating the job submission to a job scheduler for dynamic allocation of a second subset of the plurality of HPC nodes, ([0086], line 20-31), the second subset (nodes 800-8 to 800-10, [0086], line 20-31), comprising a substantially similar set of nodes as the first subset, (nodes 800-1 to 800-7, [0086], line 23).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teaching of Haynes and communicating the job submission to a job scheduler for dynamic allocation of a second subset of the plurality of HPC nodes as described by Neiman to generate a Graphical User Interface in a HPC environment, which can dynamically process a job submission.

15. Regarding claim 6, 13, and 20, Haynes discloses updating the view of the topology based on dynamic allocation of the increased size. (section 5, line 88-97)

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Haynes doesn't disclose communicating an interactive command to the job scheduler for an increase in size of the second subset.

Neiman discloses communicating an interactive command to the job scheduler for an increase in size of the second subset. (a high priority job has bigger size of nodes, [0086], line 20-31)

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teaching of Haynes and communicating an interactive command to the job scheduler for an increase in size of the second subset as described by Neiman to generate a Graphical User Interface in a HPC environment, which can dynamically process a job submission.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yi Chen whose telephone number is 571-270-3805. The examiner can normally be reached on 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil Elhady can be reached on 571-272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/26/2007

Yi Chen



N. El-Hady

NABIL M. EL-HADY  
SUPERVISORY PATENT EXAMINER